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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,502	09/24/2003	Lanying Z. Wu	53394.000719	2286

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EXAMINER
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BOGART, MICHAEL G

ART UNIT	PAPER NUMBER
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3761

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/668,502	<b>Applicant(s)</b> WU ET AL.	
	<b>Examiner</b> Michael G. Bogart	<b>Art Unit</b> 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) 39-75 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18-36 and 38 is/are rejected.
- 7) ☒ Claim(s) 17 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/25/03; 12/03/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restriction***

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- I. Claims 1-39, drawn to an elastic assembly having a single elastic layer and a garment comprising the same, classified in class 604, subclass 385.29.
- II. Claims 39-57, drawn to a garment comprising an elastic assembly having multiple elastic layers, classified in class 604, subclass 385.24.
- III. Claims 58-75, drawn to a method of forming an elastic assembly, classified in class 156, subclass 160.

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because it does not require a unitary elastic layer having a central inelastic portion. The subcombination has separate utility such as it may be used without a second elastic layer.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Inventions I, II and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as

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claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the claimed elastic layers elastic strands may be attached by non-adhesive means, such as welding.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Bill Roland on 14 October 2005 a provisional election was made without traverse to prosecute the invention of I, claims 1-38. Affirmation of this election must be made by applicant in replying to this Office action. Claims 39-75 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Specification***

The disclosure is objected to because of the following informalities:

The status of parent application No. 09/985,885 should be updated in the first paragraph of the specification.

Appropriate correction is required.

### ***Claim Rejections – 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 1-5, 8-12 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Migaku *et al.* (GB 2 118 021 A).

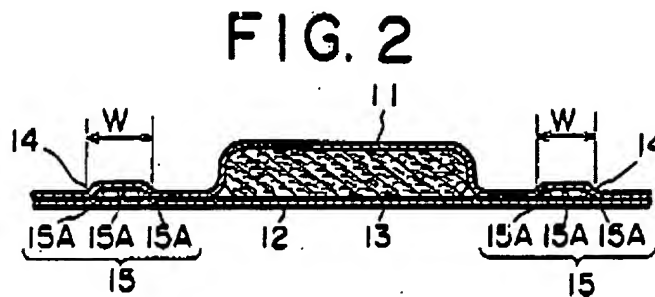
Regarding claim 1, Migaku *et al.* teach an elastic assembly (15) for absorbent garments (10) comprising:

a first carrier layer (11);

a second carrier layer (12);

an elastic layer (15) attached between the first and second carrier layers to impart elasticity to an elasticized portion of the elastic assembly, the elastic layer (15) comprising elastic strands (15A) arranged generally in parallel with one another; and

wherein the first and second carrier layers (11, 12) are attached to one another in the elasticized portion substantially only by a coating of adhesive on the elastic strands (15)(page 4, line 63-page 5, line 20)(see figure 2, below).



Migaku *et al.* fail to teach the specific dimensions of the strand decitex (diameter), the strand spacing, elasticized portion thickness, number of corrugations per unit area, assembly width, total number of strands or density of adhesive coating.

Generally, differences in ranges of dimensional parameters will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such test characteristic is critical. “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). Regarding the instant invention, the benefits of optimizing dimensions of the elastic strands and the elastic portion, as well as the number of elastic strands per area would have been known prior making the device of Migaku *et al.*, making these values result-effective variables. One of ordinary skill in the art would have recognized that optimizing the dimensions and/or density of the elastic materials would provide the desired level of elasticity for user comfort and securement.

Regarding claims 9 and 10, Migaku *et al.* teach that the elastic strands (15A) are attached to the diaper (10) by stretch bonding (page 3, lines 34-49).

Regarding claim 18, Migaku *et al.* teach that the garment (10) is a diaper (figure 2).

→ Claims 6 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Migaku *et al.* as applied to claims 1-5, 8-12 and 18 above, and further in view of VanGompel *et al.* (US 6,336,922 B1).

Regarding claim 6, Migaku *et al.* fail to teach that both carrier layers (11, 12) are nonwoven.

VanGompel *et al.* teach an absorbent article having an elastic assembly (60) having first and second carrier (80, 82) layers made of nonwoven materials (column 14, lines 13-26).

At the time of the invention, it would have been obvious for one of ordinary skill in the art to make the carrier panels of Migaku *et al.* out of a nonwoven substrate as taught by VanGompel *et al.* in order to provide a extendable material which may be made stretchable when elastic is adhered thereto.

Regarding claim 7, Migaku *et al.* and VonGompel *et al.* do not teach the specific basis weight of the claimed invention.

As discussed previously, mere changes in dimensional parameters are not enough to patentably distinguish a claimed invention from the prior art. See *In re Aller*, supra.

Claims 1, 13-16, 19-36 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over VanGompel *et al.* in view of Migaku *et al.*

Regarding claim 1, VanGompel *et al.* teach an elastic assembly (60) for absorbent garments (20) comprising:

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a first carrier layer (52);

a second carrier layer (34);

an elastic layer (80, 82, 84) attached between the first and second carrier layers (52, 34) to impart elasticity to an elasticized portion (82, 84) of the elastic assembly (60), the elastic layer (80, 82, 84) comprising elastic strands arranged generally in parallel with one another (column 14, lines 17-49; column 16, lines 5-25)(see figures 2 and 3, below).

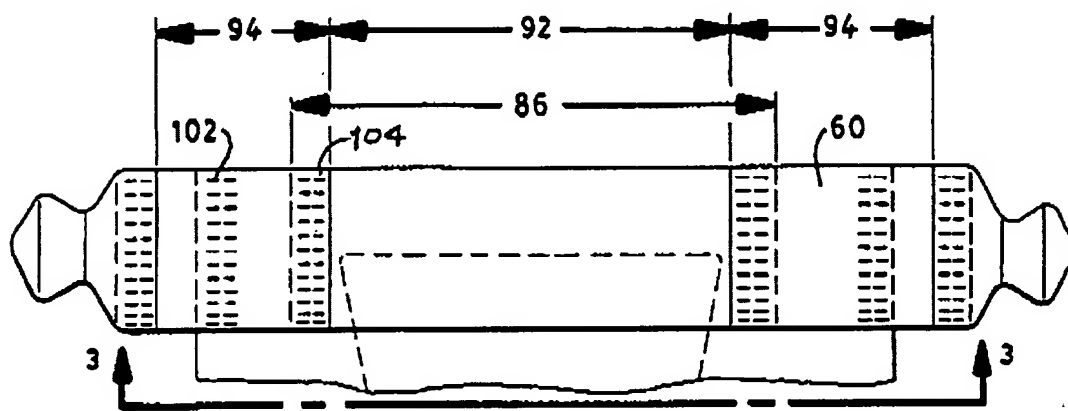


FIG. 2

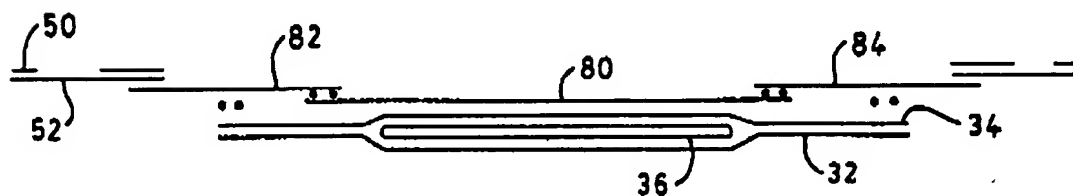


FIG. 3

VanGompel *et al.* do not teach that the first and second carrier layers are attached to one another only by a coating of adhesive on elastic strands.



Migaku *et al.* teach an absorbent article having carrier layers (11, 12) attached to each other in an elasticized area (15) only by a coating of adhesive on elastic strands (15A) between the two layers (page 4, line 63-page 5, line 20)(see figure 2).

VanGompel *et al.* in view of Migaku *et al.* fail to teach the specific dimensions if the strand decitex (diameter), the strand spacing, elasticized portion thickness, number of corrugations per unit area, assembly width, basis weight of the carrier layers, total number of strands or density of adhesive coating.

Generally, differences in ranges of dimensional parameters will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such test characteristic is critical. *In re Aller*, supra.

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, supra. Regarding the instant invention, the benefits of optimizing dimensions of the elastic strands and the elastic portion, as well as the number of elastic strands per area would have been known prior making the device of VanGompel *et al.* in view of Migaku *et al.*, making these values result-effective variables. One of ordinary skill in the art would have recognized that optimizing the dimensions and/or density of the elastic materials would provide the desired level of elasticity for user comfort and securement.

Regarding claim 13, VanGompel *et al.* teach that the elastic assembly has a relatively inelastic (80) region located between the first and second elasticized regions (82, 84)(column 12, lines 9-61).

Regarding claim 14, VanGompel *et al.* teach that the third portion (86) of the elastic layer (80, 82, 84) is severed in the inelastic region (80).

Regarding the process limitations as to how the elastic layer is severed, product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 15, VanGompel *et al.* teach that the third portion of the elastic layer (80, 82, 84) is severed by at least a one-dimensional pattern of cuts in the inelastic region (80)(e.g., the left terminus of layer (80)).

Regarding claim 16, VanGompel *et al.* teach that a two-dimensional pattern of cuts in the inelastic region (80) (e.g., the left and right ends of layer (80)).

Regarding claim 19, VanGompel *et al.* teach an absorbent garment (20) comprising:

- a first waist region (22);
- a second waist region (24);
- a crotch region (26) extending between the first and second waist regions (22, 24);
- a core assembly (32, 34, 36) located at least partially within the crotch region (26), the core assembly (36) comprising a substantially fluid-pervious body-facing topsheet (34), a

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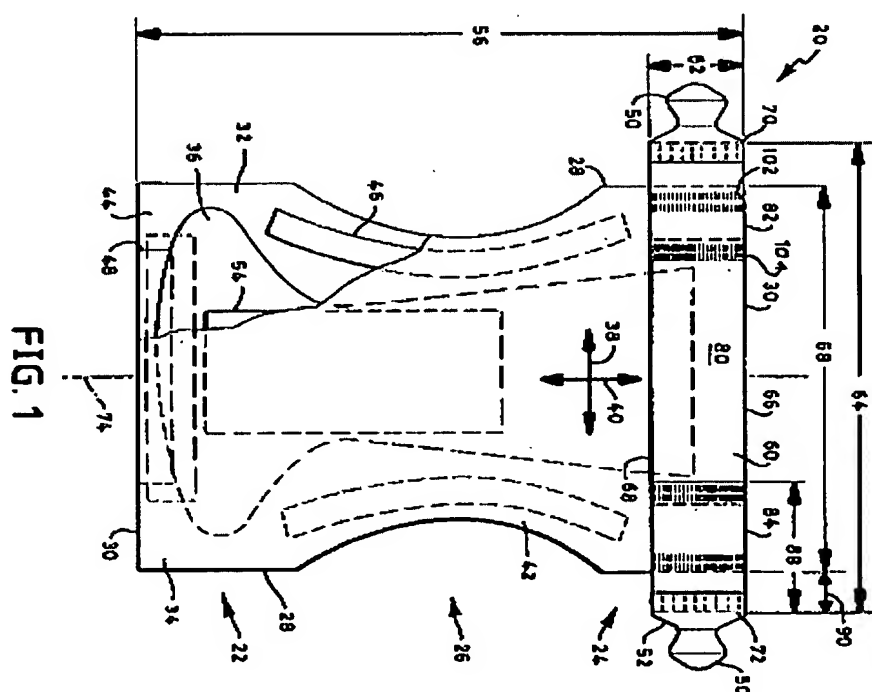
substantially fluid-impervious backsheet (32) and an absorbent core (36) between the topsheet (34) and the backsheet (36);

at least one elastic assembly (60) located in at least one of the first waist region (22) and second waist region (24), the at least one elastic assembly (60) comprising:

a first carrier layer (52);

a second carrier layer (34);

an elastic layer (80, 82, 84) attached between the first and second carrier layers to impart elasticity to an elasticized portion of the garment (20), the elastic layer (80, 82, 84) comprising elastic strands (column 14, lines 17-49)(figure 1).



Regarding claim 33, VanGompel *et al.* teach that the elastic assembly (60) has a relatively inelastic (80) region located between the first and second elasticized regions (82, 84)(column 12, lines 9-61).

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Regarding claims 34, VanGompel *et al.* teach that the third portion (86) of the elastic layer (80, 82, 84) is severed in the inelastic region (80).

Regarding the process limitations as to how the elastic layer is severed, product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. See *In re Thorpe*, supra.

Regarding claim 35, VanGompel *et al.* teach that the third portion of the elastic layer (80, 82, 84) is severed by at least a one-dimensional pattern of cuts in the inelastic region (80)(e.g., the left terminus of layer (80)).

Regarding claim 36, VanGompel *et al.* teach that a two-dimensional pattern of cuts in the inelastic region (80)(e.g., the left and right ends of layer (80)).

Regarding claim 18, VanGompel *et al.* teach that the garment (20) is a diaper (figure 1).

### ***Allowable Subject Matter***

Claims 17 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The art of record fails to disclose or fairly suggest an elastic assembly as detailed in the rejections of claims 1 and 19, having first and second carrier layers bonded to each other at each cut.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bogart whose telephone number is (571) 272-4933.

In the event the examiner is not available, the Examiner's supervisor, Tatyana Zalukaeva may be reached at phone number (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for formal communications. For informal communications, the direct fax to the Examiner is (571) 273-4933.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Bogart  
20 October 2005

**TATYANA ZALUKAEVA**  
**SUPERVISORY PRIMARY EXAMINER**

